



SC

BIOL2252 Biotechnologie des plantes

[20h+10h exercices] 3 credits

This course is taught in the 1st semester

Teacher(s): Stanley Lutts
Language: french
Level: 2nd cycle course

Aims

Describe the different manipulations applied to vegetal cells and to plants, the results obtained and the consequences that we can hope for, for a better knowledge of plants and for their improvement.

Concerns: mandatory in BIOL22.4

Main themes

- 1/ In vitro culture methods of vegetal tissues and somatic cells : description of stages of the culture, its applications, the variation it induces, the problems posed by this variation and of its possible use.
- 2/ Using cultures of vegetal cells for industrial production of secondary metabolites and for biotransformation.
- 3/ Ways of inducing haploïdy, mainly by antheridy and microspore cultures ; using haploïds.
- 4/ Somatic hybridation by protoplast fusion, functioning of regenerated cells and of hybrid plants, asymmetric hybrids and genetic information transfert, cybrides and mitochondrial and chloroplast transfert.

Other credits in programs

BIOL22/B	Deuxième licence en sciences biologiques (Biologie des organismes et des populations)	(3 credits)
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